AMENDMENTS TO THE SPECIFICATION

Please replace the indicated paragraphs with the enclosed replacement paragraphs, marked-up to show changes.

[0043] FIGS. 11-14 show further details of the nozzle assembly 156. FIG. 13 shows the nozzle assembly as including a main tube 220 having an interior surface 222 and an exterior surface 224 and extending from an upstream rim 226 to a downstream rim 230 essentially defining the outlet 30'. The interior surface may be at substantially even radius from the centerline as interior surfaces of other components described above. The flange 154 includes a main upstream piece 232 having upstream and downstream faces 234 and 236, an interior surface 237, and an exterior peripheral surface 238. The main piece 232 is secured to an upstream portion of the main tube 220 with its interior surface 237 bounding a central aperture 239 and contacting the exterior surface of the tube. Exemplary connection is by welding. An annular plenum 240 may be machined in the main flange piece 232 (e.g., as a rebate of an inboard portion of the downstream face). An outboard portion of the channel is closed by the second flange piece 242 having upstream and downstream faces 244 and 246, an interior surface 248, and an exterior periphery 250. The upstream face 244 may abut the first piece downstream face 236 and be sealed thereto such as via an O-ring 252 residing at least partially in a channel in one or both of the pieces. The two pieces may be held together by the same bolts/nuts 160 or by separate bolts, welds, or the like. The interior surface 248 is spaced slightly apart from the tube exterior surface 224. A sleeve 254 has interior and exterior surfaces 256 and 258 and extends from an upstream end/rim 260 to a downstream end/rim 262 (FIG. 13). The interior surface 256 is similarly spaced apart from the tube exterior surface 224 and an upstream end portion is secured to the flange second piece (e.g., accommodated in an annular rebate and welded thereto). A metering ring 264 circumscribes the plenum 240 to separate radially inboard and outboard portions thereof and has a plurality of apertures therein. One or more feed passageways 270 (two shown) are in communication with the plenum 240. The passageways 270 are in communication with ports (e.g., in the flange first piece) 272 carrying fittings 274.

A cooling fluid (e.g., a gas which may be similar to the air curtain gas) is introduced along a nozzle cooling flowpath downstream through the fittings, passageways, and into the outboard portion of the plenum 240. The ring 264 and its apertures meter the flow from the outboard portion of the plenum 240 to the inboard portion and help circumferentially distribute the flow when there are a relatively small number of discrete feed ports. From the inboard/downstream portion of the plenum 240, the flow proceeds downstream in generally annular space 276 between the sleeve 254 and tube 220. In the exemplary embodiment, the cooling gas flow is discharged from a cooling gas outlet 278 between the sleeve downstream rim 262 and the adjacent portion of the tube exterior surface 224. In the exemplary embodiment, the sleeve downstream rim is slightly recessed relative to the tube downstream rim so as to mitigate the influence of the detonation wave on the cooling gas flow and mitigate the effect of the wave on the potentially relatively thin and fragile sleeve.